



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,311	02/13/2002	Takahisa Kato	03560.003024	4471

5514 7590 05/14/2003

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

DONOVAN, LINCOLN D

ART UNIT PAPER NUMBER

2832

DATE MAILED: 05/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/073,311

Applicant(s)

Kato et al.

Examiner

Lincoln Donovan

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Mar 3, 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above, claim(s) 6-8, 11, 12, 14, 15, 22-25, 31, 32, and 34-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9, 10, 13, 16-21, 26-30, and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5 6) ☐ Other:

Art Unit: 2832

## DETAILED ACTION

### *Election/Restriction*

1. Claims 6-8, 11-12, 14-15, 22-25, 31-32 and 34-45 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claimed inventions and species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 8.

### *Priority*

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al. [US 5,880,653].

Regarding claim 1, Yamada et al. disclose an electromagnetic relay [figure 1] comprising:

- a first support member [20];

Art Unit: 2832

- a movable body [43];
- a pair of elastic torsion spring supporting means [42c] having a twisting longitudinal axis, the elastic supporting means supporting the movable body flexibly and rotatably about the axis relative to the first support member.
- a stationary magnetic core [11] having opposing end faces [11a, 11b];
- a magnetic coil [16] wound on the stationary core for tilting the movable body in a tilting direction about the axis; and
- a moving core [40] formed of a magnetic material provided on a portion of the movable body, disposed between the spring means and the faces of the stationary core, having at least one face opposing at least one of the faces of the stationary core.

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10, 13, 16 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. in view of Agatahama [US 4,553,118].

Art Unit: 2832

Yamada et al. disclose the instant claimed invention except for the movable core member being provided on each side of the movable body, parallel to the axis and spaced apart from each other.

Agatahama discloses a support member [300] having a movable core member being provided on each side of the movable body, parallel to the axis and spaced apart from each other.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the core support design of Agatahama for the core of Yamada et al., for the purpose of controlling the application of magnetic force thereto.

7. Claims 17 and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. in view of Lee et al. [US 6,541,831].

Yamada et al. disclose the instant claimed invention except for the movable body being formed of crystal silicon and being used as an actuator in an optical device.

Lee et al. discloses a support body supporting an optical device for use in an optical actuator.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use crystal silicon for the support body of Yamada et al. for the purpose of providing structural rigidity.

The specific optical device supported by device would have been an obvious design consideration based on the specific application.

Art Unit: 2832

8. Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. Yamada et al. disclose the instant claimed invention except for the specific material used to for the core members.

The specific material used to form the core members would have been an obvious design consideration based on the desired speed, necessary sensitivity, operating environment, etc.

*Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Lincoln Donovan whose telephone number is (703) 308-3111.

The fax number for this Group is (703)-872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1782.

LDD

May 12, 2003

  
LINCOLN DONOVAN  
PRIMARY EXAMINER  
GROUP 2100